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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,882	06/21/2006	Anthony Martin	15568.28	8754

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EXAMINER	
JOYNER, KEVIN	
ART UNIT	**PAPER NUMBER**
1797	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/583,882	MARTIN, ANTHONY	
	Examiner	Art Unit	
	KEVIN C. JOYNER	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 June 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

FINAL ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornby (U.S. Patent No. 4,249,463) in view of McVey et al. (U.S. Publication No. 2004/0184950).

Hornby discloses an enclosure (30) for carrying out an operation under sterile conditions comprising a main chamber (11), a plenum chamber, a filter (15 and 23) separating the plenum chamber from the main chamber, a pump (16) for the plenum chamber for delivering air into the plenum chamber and then through the filter to the main chamber to create a filtered flow of air through the chamber and means for drawing gas from the enclosure via an outlet from the plenum chamber to create a flow from the main chamber through the filter decontaminating the filter and through the plenum chamber to the outlet to maintain pressure in the main and plenum chambers below atmospheric so that any leak paths result in leakage from the atmosphere into the chambers (column 1, lines 35-50; column 2, lines 26-40). Hornby does not appear to disclose that the main chamber contains a first apparatus disposed within the chamber for generating and delivering a sterilant vapour from a supply held within the chamber to

be distributed throughout the chamber to sterilize the surfaces. McVey discloses an enclosure for carrying out an operation under sterile conditions comprising a main chamber as shown in Figure 1. The reference continues to disclose that the main chamber contains a first apparatus (42) disposed within the chamber in order to generate and deliver a sterilant vapour from a supply held within the chamber to be distributed throughout the chamber to sterilize the surfaces (paragraph 23). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a first apparatus disposed within the main chamber in order to generate and deliver a sterilant vapour from a supply held within the chamber to be distributed throughout the chamber to sterilize the surfaces as exemplified by McVey.

Regarding claim 6, as described above with respect to claim 1 Hornby continues to disclose that the enclosure has a main chamber and a plenum chamber separated from the main chamber by a filter, the plenum chamber having a pump (16) for delivering air into the plenum chamber through the filter (15 and 23) to the main chamber to create a filtered flow of air through the chamber and the means for drawing gas from the chamber remote from the first apparatus is connected to the plenum chamber as shown in Figure 2 (column 1, lines 35-50; column 2, lines 26-40). Hornby does not appear to disclose an apparatus for producing sterilant vapour located within the main chamber and within which the operation to be carried out in the chamber is performed. McVey discloses an enclosure for carrying out an operation under sterile conditions comprising a main chamber as shown in Figure 1. The reference continues to disclose that the main chamber contains a first apparatus (42) disposed within the

chamber in order to generate and deliver a sterilant vapour from a supply held within the chamber to be distributed throughout the chamber to sterilize the surfaces (paragraph 23). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a first apparatus disposed within the main chamber in order to generate and deliver a sterilant vapour from a supply held within the chamber to be distributed throughout the chamber to sterilize the surfaces as exemplified by McVey.

3. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornby (U.S. Patent No. 4,249,463) in view of McVey et al. (U.S. Publication No. 2004/0184950) as applied to claim 1 above, and further in view of Childers (U.S. Patent No. 5,906,794).

Regarding claims 2-4, Hornby continues to disclose that the means for drawing gas from the enclosure comprises a fan (32) located in a conduit connected to an outlet from the enclosure. Hornby does not appear to disclose a means for rendering sterilant reaching the conduit ineffective to avoid release of sterilant to the atmosphere. Childers discloses an enclosure for carrying out an operation under sterile conditions comprising a main chamber and an apparatus for generating and delivering a sterilant vapor to the chamber as shown in Figure 6. The reference continues to disclose an outlet from the chamber that contains a means (20) for rendering the sterilant reaching a conduit ineffective comprising a catalytic converter that is located upstream of a fan in order to decompose the sterilant to harmless constituents comprising water and oxygen (column 5, lines 59-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Hornby to include a second

apparatus for rendering the sterilant reaching a conduit ineffective comprising a catalytic converter that is located upstream of a fan in order to decompose the sterilant to harmless constituents comprising water and oxygen as exemplified by Childers.

4. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornby (U.S. Patent No. 4,249,463) in view of McVey et al. (U.S. Publication No. 2004/0184950) and Childers (U.S. Patent No. 5,906,794) as applied to claims 3 and 4 above, and further in view of McClure (U.S. Patent No. 4,601,885).

Hornby in view of McVey and Childers is relied upon as set forth above. Regarding claim 5 and 12, Hornby in view of McVey and Childers does not appear to disclose that the conduit has selectively operable valve controlled outlets of larger and smaller capacities, the smaller capacity outlet being open during said period when the enclosure is to be maintained at a predetermined reduced pressure and the larger valve controlled outlet being opened during discharge of the sterilant atmosphere from the enclosure. McClure discloses a sterilization system for an enclosure that includes and outlet to relieve pressure from within the system (column 2, lines 15-24). The reference continues to disclose that the outlet has selectively operable valve controlled outlets of larger and smaller capacities, the smaller capacity outlet (41) is capable of being open during a period when the enclosure is to be maintained at a predetermined reduced pressure and the larger valve (38) is capable of being opened during discharge of the sterilant atmosphere from the enclosure (column 4, lines 1-35; Figure 2). McClure also discloses that the valves are utilized in order to control the pressure throughout the system. Thus, it would have been obvious to one of ordinary skill in the art at the time

of the invention to modify the outlet conduit of Hornby to include selectively operable valve controlled outlets of larger and smaller capacities, the smaller capacity outlet is capable of being open during a period when the enclosure is to be maintained at a predetermined reduced pressure and the larger valve is capable of being opened during discharge of the sterilant atmosphere from the enclosure in order to accurately control the pressure throughout the system as exemplified by McClure.

5. Claims 7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornby (U.S. Patent No. 4,249,463) in view of McVey et al. (U.S. Publication No. 2004/0184950) as applied to claim 6 above, and further in view of Krainiak et al. (U.S. Patent No. 5,711,705).

Hornby in view of McVey is relied upon as set forth in reference to claim 6. Concerning claims 7 and 10, While Hornby discloses an outlet from the plenum chamber, Hornby in view of McVey does not appear to disclose that the outlet from the plenum chamber contains an exhaust filter though which air/sterilant vapour is drawn from the chamber. Krainiak discloses an enclosure for carrying out an operation under sterile conditions comprising a plenum chamber, a filter separating the plenum chamber from the main chamber, a pump for the plenum chamber for delivering air into the plenum chamber and then through the filter to the main chamber to create a filtered flow of air through the chamber and means for drawing gas from the enclosure via an outlet from the main chamber to create a flow of sterilant vapour from the main chamber through the filter decontaminating the filter and through the plenum chamber (Figure 3, columns 3 and 4). The reference continues to disclose an outlet that comprises an

exhaust filter (34) in order to remove particulates from the pathway to the atmosphere (column 4, lines 5-8; column 4, lines 35-45). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Hornby to include an exhaust filter in the outlet conduit though which air/sterilant vapour is drawn from the chamber in order to remove particulates from the pathway to the atmosphere as exemplified by Krainiak. Regarding claim 11, The Manual of Patent Examining Procedures discloses that in *In re Harza,* 274, F.2d 669, 124 USPQ 378 (CCPA 1960), a mere duplication of parts for a multiplied effect has no patentable significance unless a new and unexpected result is produced (See MPEP 2144.04). Accordingly, the addition of two spaced filters in the outlet is considered to be not patentably distinct from the disclosed references.

6. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornby (U.S. Patent No. 4,249,463) in view of McVey et al. (U.S. Publication No. 2004/0184950) as applied to claim 1 above, and further in view of Morrow et al. (U.S. Patent No. 2002/0168305).

Hornby is relied upon as set forth in reference to claim 1. Hornby does not appear to disclose that the enclosure contains a second apparatus comprising a housing containing a catalytic converter for converting the sterilant into harmless byproducts for disposal and means for circulating the atmosphere of the chamber through the housing to reduce the sterilant concentration in the atmosphere when the sterilization operation has been performed. Morrow discloses an apparatus for use in an enclosure that is capable of rendering sterilant in the atmosphere in a chamber

ineffective (paragraphs 2 and 46-49). The reference continues to disclose that the apparatus contains a housing (12) containing a catalytic converter (paragraph 57) capable of converting the sterilant into harmless byproducts for disposal and means (20) for circulating the atmosphere of the chamber through the housing capable of reducing a sterilant concentration in the atmosphere when a sterilization operation has been performed. The second apparatus is utilized to provide an airstream free from contamination and other elements harmful to people. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Hornby to include a second apparatus comprising a housing containing a catalytic converter capable of converting the sterilant into harmless byproducts for disposal and means for circulating the atmosphere of the chamber through the housing capable of reducing a sterilant concentration in the atmosphere when a sterilization operation has been performed in order to provide an airstream free from contamination and other elements harmful to people as exemplified by Morrow.

Response to Arguments

7. Applicant's arguments filed April 24, 2008 have been fully considered but they are not persuasive.

Applicant's principle arguments are:

(a) Applicant notes that there is no provision in Hornby for sterilizing the main chamber. The Hornby apparatus is simply an arrangement which enables dangerous material to be worked on within the enclosure. Hornby discloses that one of its main

purposes is to provide an improved workstation which is suitable for use in handling potentially dangerous material. As is known in the art, the purpose of such a biological workstation is to carry out experiments and processes using the biological substances, not to indiscriminately destroy the substances. Consequently, adding a decontamination system [of McVey] to the safety cabinet [of Hornby] does not make sense, as this would cause the biological agents to be destroyed, thus not allowing the users of the workstations to use and handle such agents.

It must also be noted that the reference of Hornby specifically discloses situations wherein the biological substances are spilled in the chamber (column 1, lines 19-23; column 2, lines 26-31). It is in that instance that one of ordinary skill would look to the prior art in order to sterilize the enclosure from the spill. It must also be noted that the reference of Hornby primarily discloses the use of an enclosure comprising a main chamber and a plenum chamber located above the main chamber, wherein a ductwork system is utilized to ventilate and filter circulated air throughout the enclosure as shown in Figures 1 and 2. Similarly, McVey discloses a system with analogous parts including an enclosure with a main chamber (referenced as a room) and a plenum chamber (paragraph 4) including a ductwork system to ventilate and filter circulated air throughout the enclosure in paragraphs 4 and 5. As such, McVey offers a solution to decontaminating the enclosure if it becomes contaminated with a biological substance (paragraph 36) by providing a first apparatus with the main chamber for generating and delivering a sterilant vapour from a supply held within the chamber to be distributed throughout the chamber to sterilize the surfaces (paragraph 23). Therefore, it would

have been obvious to include a first apparatus within the main chamber of Hornby to generate and deliver a sterilant vapour to sterilize the surfaces in the chamber as exemplified by McVey in order to sterilize said enclosure in the event that it becomes contaminated with a biological substance.

(b) Applicant submits that Hornby does not teach or suggest "a filter separating the plenum chamber from the main chamber … and means for drawing gas from the enclosure via an outlet from the plenum chamber, "as recited in amended claim 1.

It appears as though the Applicant may have misinterpreted the plenum chamber in the reference of Hornby. The plenum chamber constitutes the area from the top of the enclosure (as shown at numeral 10 in Figure 1) to the top portion of screen (23), wherein the screen is a filter as broadly defined. In this respect, the screen (23) separates the main chamber (11) from the plenum chamber, and a means is provided for drawing gas from the enclosure via an outlet (referenced as a smaller area 22) from the plenum chamber.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN C. JOYNER whose telephone number is (571)272-2709. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCJ

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1797